

Replacement Page 1, 1st and 2nd Paragraphs

BACKGROUND OF THE INVENTION

The present invention relates to a method for a qualitative or quantitative detection of a nucleic acid in a sample by means of amplification of this nucleic acid and by using one or several reversibly binding detection probe(s) in which an internal nucleic acid is used that is devised as a control of false-negative results.

The qualitative or quantitative detection of nucleic acid molecules, be it DNA, be it RNA, is an important method of the laboratory medical chemistry especially since PCR-suitable polymerases (PCR = polymerase chain reaction) have been discovered. For this purpose, the target molecules that are present in only a few copies, or even only as a single copy, are amplified and detected by means of probes that can indicate the presence of these molecules.

Replacement Page 3, Paragraph Lines 20-21

SUMMARY OF THE INVENTION

It is the object of the present intention to provide a simplified internal control for a nucleic acid detection method in which the nucleic acid is amplified.

Replacement Paragraph Page 4, Lines 16 to 19

In a preferred embodiment of the invention, the melting point of the product of control nucleic acid and probe(s) is lower and according to the above discussions is especially preferred lower by at least 5°C than that of the product of the nucleic acid to be detected and the probe(s). Thus, the temperature difference is at least 5 °C, preferably at least 10 °C, and even more preferred at least 15 °C.

Replacement Paragraph Page 6, 1st Full Paragraph

The above discussion shows that in many cases it will be sufficient to exchange in the nucleotide sequence of the control nucleic acid within the binding region for the detection probe(s) only one nucleotide present in the nucleic acid to be detected for another one. Preferably, at least two deviations (mismatches) are present therein. Preferably, there are three to five mismatches. In order to make the binding of the probe to the control nucleic acid in other respects as comparable to the binding of the probe to the nucleic acid to be detected, it is beneficial in this connection when the mismatches are distributed as uniformly as possible across the binding region.

Paragraphs to Be Inserted Between Lines 19-20 of Page 10

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 illustrates the detection of a pathogen-specific amplification product in the annealing step of PCR.

Fig. 2 shows the result of the melting analysis.

DESCRIPTION OF PREFERRED EMBODIMENTS